

CLAIMS:

1. A poly-V pulley made of metal sheet comprising:

a cylindrical peripheral wall,

5 annular ears for preventing a V belt from disengaging,
the ears being protrusively formed in axially both ends of an
outer surface of the peripheral wall, and

poly-V grooves disposed between the both ears on the outer
surface of the peripheral wall,

10 wherein at least one of the both ears includes an inner
ear portion protruded from the end of the peripheral wall to
the outward direction, and an outer ear portion folded back from
the protruded outer end of the inner ear portion to an outer
surface of the inner ear portion, so as to be closely fitted
15 therewith, and the inner end surface of the ear is formed to
be flush with the inner surface of the peripheral wall.

2. A method of manufacturing a poly-V pulley made of metal
sheet, the poly-V pulley made of metal sheet comprising:

20 a cylindrical peripheral wall,

annular ears for preventing a V belt from disengaging,
the ears being protrusively formed in axially both ends of an
outer surface of the peripheral wall, and

poly-V grooves disposed between the both ears on the outer
25 surface of the peripheral wall,

wherein at least one of the both ears includes an inner ear portion protruded from the end of the peripheral wall to the outward direction, and an outer ear portion folded back from the protruded outer end of the inner ear portion to an outer surface of the inner ear portion, so as to be closely fitted therewith, and the inner end surface of the ear is formed to be flush with the inner surface of the peripheral wall, comprising the steps of:

forming a cup-shaped forming body which has a bulging middle portion-peripheral wall like a barrel, integrated with an outer periphery of a circular bottom wall;

preparing a roller for forming ears provided with a concave forming surface and an annular projection, the concave forming surface which is concavely arc-shaped being disposed on an axial center portion of the outer surface, and the annular projection whose section is V-shaped being disposed on axially both ends of the concave forming surface;

applying a compressive load to the cup-shaped forming body in the axial direction at the same time while pressing the annular projection of the roller for forming ears against the outer surface of the bulging middle portion-peripheral wall in a radially inward direction thereof,

folding at least axial one end of the bulging middle portion-peripheral wall into two, and

protrusively forming inner and outer ear portions

overlapped so as to be closely fitted with each other;

pressing a straightening roller having a shaping surface perpendicular to the outer periphery of the bulging middle portion-peripheral wall, against the outer surface of the
5 bulging middle portion-peripheral wall in the radially inward direction thereof,

straightening the bulging middle portion-peripheral wall so as to be parallel with the axial direction, and

forming the perpendicular peripheral wall;

10 shaping the each poly-V groove between the ears on the outer surface of the perpendicular peripheral wall by means of rolling;

shearing a connecting portion between the bottom wall of the perpendicular peripheral wall and the ear, so as to remove
15 the bottom wall; and

finally performing a machining work so as to make the inner end surface of the ear flush with the inner surface of the perpendicular peripheral wall.